



DEPARTMENT OF WATER RESOURCES
EXAMINATION ANNOUNCEMENT



The Department of Water Resources offers Equal Opportunity for all regardless of race, color, creed, national origin, ancestry, sex, marital status, disability, religious or political affiliation, age, or sexual orientation.

It is an objective of the State of California to achieve a drug-free State workplace. Any applicant for State employment will be expected to behave in accordance with this objective because the use of illegal drugs is inconsistent with the law of the State, the rules governing civil service and the special trust placed in public servants.

INTERNET EXAMINATION ANNOUNCEMENT
ENGINEER, WATER RESOURCES
OPEN – STATEWIDE
CONTINUOUS TESTING

This examination is administered by the State Personnel Board utilizing the Internet.

HOW TO APPLY The Application and the Training and Experience Evaluation will be available on a continuous basis on the Internet. Applicants will respond to questions regarding their ability to meet minimum qualifications, provide their contact information, and take the Training and Experience Evaluation on the Internet.

DO NOT SUBMIT A STATE APPLICATION FORM. THE APPLICATION FORM FOR THE ENGINEER, WATER RESOURCES IS CONTAINED IN THE INTERNET PROCESS.

If you do not have Internet access, there are public access Internet terminals in over 150 California public libraries. Contact your local library for information as to where the nearest Internet terminal is located and the policies related to usage. DO NOT contact the State Personnel Board or the Department of Water Resources for this information. The State Personnel Board and the Department of Water Resources do not maintain an up-to-date list of library locations. The State Personnel Board Service Center has Internet terminals that are available for public use at no cost. For more information, contact the Service Center at (916) 653-1705.

If you are not familiar with the Internet, you may have a friend or family member assist you. You may apply and take the examination on the Internet by connecting to:

http://www.spb.ca.gov/employment/exam_start.htm

and following the on-line instructions. Please note that the Internet system will be unavailable on Tuesday, between 8:00 a.m. and 4:00 p.m., Pacific Standard Time for processing and maintenance. DO NOT begin the application process on the Internet during this time, as your record will NOT be processed. It takes approximately 2 hours to complete the Application and the Training and Experience Evaluation on the Internet.

IDENTIFICATION REQUIRED Accepted applicants are required to bring either a photo identification card or two forms of signed identification to each phase of the examination.

SPECIAL TESTING ARRANGEMENTS If you have a disability and need special testing arrangements, mark the appropriate box in Question 2 of the "Application for Examination". You will be contacted to make specific arrangements.

SALARY RANGE
Range A \$4279 - \$4953
Range B \$4899 - \$5951
Range C \$5604 - \$6807
Range D \$6270 - \$7617

ALTERNATE RANGE CRITERIA Range A. This range shall apply to incumbents who do not meet the criteria for Range B, Range C, or Range D.

Range B. This range shall apply to incumbents who have satisfactorily completed either:

- 1. In State service, satisfactorily completed one year of experience performing duties equivalent to an Engineer, Water Resources, Range A. **OR**
- 2. Two years of professional civil engineering experience outside State service. **AND** A bachelor's degree in a civil engineering curriculum accredited by the Accreditation Board of Engineering Technology. (Possession of a valid certificate as an Engineer-in-Training issued by the State Board of Registration for Professional Engineers and Land Surveyors or issued by another jurisdiction and accepted by the State Board in lieu of the first division of the registration examination as a professional engineer may be substituted for the required education.) **OR**
- 3. Four years of professional civil engineering experience outside State service. **AND** A bachelor's or graduate degree in a civil engineering curriculum which is not accredited by the Accreditation Board of Engineering Technology. **OR**
- 4. A master's or doctorate degree in a civil engineering curriculum from a college or university that has a baccalaureate degree program in a civil engineering curriculum which is accredited by the Accreditation Board of Engineering Technology.

Range C. This range shall apply to persons who have either:

- 1. In State service, satisfactorily completed two years of experience performing duties equivalent to an Engineer, Water Resources, Range B. **OR**
- 2. Three years of professional civil engineering experience outside of State service. **AND** A bachelor's degree in a civil engineering curriculum accredited by the Accreditation Board of Engineering Technology. (Possession of a valid certificate as an Engineer-in-Training issued by the State Board of Registration for Professional Engineers and Land Surveyors or issued by another jurisdiction and accepted by the State Board in lieu of the first division of the registration examination as a professional engineer may be substituted for the required education.) **OR**
- 3. Five years of professional civil engineering experience outside State service. **AND** A bachelor's or graduate degree in a civil engineering curriculum which is not accredited by the Accreditation Board of Engineering Technology. **OR**

4. Two years of professional civil engineering experience. **AND** A master's or doctorate degree in a civil engineering curriculum from a college or university that has a baccalaureate degree program in a civil engineering curriculum which is accredited by the Accreditation Board of Engineering Technology.

Range D. This range shall apply to persons who:

Possess a valid certificate of registration as a civil engineer issued by the State Board of Registration for Professional Engineers and Land Surveyors.

Note: "Professional civil engineering experience" for the purpose of Alternate Range Criteria 351 is defined as actual work experience gained after graduation from a four-year college or university with a degree in a civil engineering curriculum or actual work experience gained after possession of a valid certificate as an Engineer-in-Training issued by the State Board of Registration for Professional Engineers and Land Surveyors or issued by another jurisdiction and accepted by the State Board in lieu of the first division of the registration examination as a professional engineer.

REQUIREMENTS
FOR ADMITTANCE
TO THE
EXAMINATION

Either I

EDUCATION: Graduation from a curriculum in civil engineering accredited by the Accreditation Board for Engineering Technology. (Registration as a "senior" in such a curriculum will admit an applicant to the competition, but he/she must produce evidence of graduation before he/she will be considered eligible for appointment.)

Or II

EDUCATION: Graduation from an engineering curriculum which includes the basic engineering courses normally covered in a standard four-year course, and by qualifying in a written examination covering basic civil engineering. (Registration as a "senior" in such a curriculum will admit an applicant to the qualifying examination, but he/she must produce evidence of graduation before he/she will be considered eligible for appointment.)

ADDITIONAL
DESIRABLE
QUALIFICATION

Competitors will be required to provide proof of graduation before eligible for appointment. The following are acceptable as proof of graduation.

1. A copy of a Bachelor's degree diploma (specifying the major);
2. Copies of transcripts indicating the award of a Bachelor's degree (with the specific major); OR
3. A letter from a recognized college or university that states the candidate has been awarded a Bachelor's degree (with a specific major).

POSITION
DESCRIPTION

This is the entry, first working, and journey level of professional engineering work in the Department of Water Resources. At the journey level and with registration, incumbents may be in a responsible charge capacity. Under the direction of a registered engineer, incumbents perform a wide variety of professional engineering work in either an office, field, or laboratory setting in any phase of the State water resources program. As incumbents progress in experience, they will be assigned more difficult work and may function as a lead person over the activities of various engineering and technical personnel; and do other related work. Incumbents assist in engineering work in connection with projects relating to land, hydraulics, roads, bridges, buildings, wharves, piers, dams, levees, sanitary facilities, and similar works; prepare designs, plans, specifications, estimates, and reports for various types of construction projects including bridges, roads, dams, aqueducts, levees, ditches, retaining walls, and similar structures; revise or prepare maps, plans, charts, and diagrams; act as a member of a survey party; keep survey and construction notes; make engineering calculations in connection with field or office work; prepare simple design work and draft working plans and detail drawings and tracings and produce drawings using CADD; oversee the work of several office and field assistants engaged in conducting studies of water supply, water quality, snow conditions, flood control, groundwater analysis, and irrigation surveys; act as inspector on a variety of construction projects such as road construction and structural steel, concrete, and timber construction; inspect structures under construction; make hydrographic and irrigation investigations; inspect, make field or laboratory tests, or take samples for laboratory analysis on materials being used for construction projects; make field inspections of existing structures to determine extent of damage, deterioration, or defects; assemble data and make reports from field investigations; may assist in the development or maintenance of computer programs; may perform engineering calculations and/or prepare other documents using a personal computer or a work station; assist in preparing environmental impact analyses, environmental impact reports, and environmental impact studies; prepare memoranda and reports; may use underwater diving equipment in connection with underwater quality control investigation.

Positions exist in various locations throughout the State with the Department of Water Resources.

EXAMINATION
INFORMATION

Testing periods are from January 1 – June 30; July 1 – December 31. Candidates may be tested only once during a testing period.

NO INTERVIEWS WILL BE CONDUCTED. This examination will consist of a written test (if required) weighted pass/fail and a Training and Experience Readiness Evaluation weighted 100%. In order to obtain a position on the eligible list, a minimum rating of 70.00% must be attained in each phase of the examination.

WRITTEN TEST
INFORMATION

A written test will be required of candidates who did not graduate from a civil engineering curriculum accredited by the Accreditation Board of Engineering and Technology (ABET). To ascertain whether your educational institution is accredited by ABET, please visit their web site at www.abet.org.

If you have any questions concerning how to take the written test, please contact Tony Reis at the Department of Water Resources, P.O. Box 942836, Sacramento, CA 94236-0001, (916) 653-7109. (Rev 04/08)

SCOPE OF
EXAMINATION

Written Test – Weighted Pass/Fail

- A. Knowledge of:**
1. Civil Engineering Fundamentals.

NOTE: Aids, such as slide rules or pocket calculators will not be allowed in this examination.

WRITTEN TEST WAIVER	<p>The written test will be waived for applicants who are “seniors” in or have graduated from a curriculum in civil engineering accredited by the Accreditation Board for Engineering and Technology. Individuals who have passed the Engineer, Water Resources test within the past 12 months will not be scheduled for the written examination. Also, individuals possessing an Engineer-in-Training Certificate will not be required to take the written examination.</p> <p>It is anticipated that once a passing score is achieved on the Engineer, Water Resources written test, it will be good for one year (or longer if considered to be in the best interest of State service.) Success in this test will permit competition in future examinations for this class during the period without retaking the test.</p>
SCOPE OF INTERNET EXAMINATION	<p>Training and Experience Readiness Evaluation – Weighted 100%</p> <p>A. Knowledge of:</p> <ol style="list-style-type: none">1. Soil mechanics, hydrology and hydraulics, stress analysis, design of simple structures and mechanics;2. Methods and equipment of engineering construction;3. Engineering economics;4. Computer software and the use of computers in engineering practice;5. Environmental principles as they pertain to engineering practices. <p>B. Ability to:</p> <ol style="list-style-type: none">1. Prepare clear and concise computations and engineering notes;2. Use computers and CADD;3. Prepare clear and concise reports;4. Prepare detailed plans and specifications;5. Inspect construction projects;6. Analyze situations accurately and take effective action;7. Maintain friendly relations with those contacted in the course of work;8. Communicate effectively at a level required for successful job performance.
ELIGIBLE LIST INFORMATION	<p>Names of successful competitors are merged onto the list, in order of final scores, regardless of date. Eligibility expires after 12 months.</p>
VETERANS PREFERENCE	<p>Veterans Preference Credit will be added to the final score of all competitors who are successful in this examination and who qualify for, and have requested these points through the State Personnel Board. Due to changes in the law effective January 1, 1996, VETERANS WHO HAVE ACHIEVED PERMANENT CIVIL SERVICE STATUS ARE NOT ELIGIBLE TO RECEIVE VETERANS’ CREDITS.</p>
QUESTIONS	<p>If you have any question concerning this announcement or the process, please contact:</p> <p>STATE PERSONNEL BOARD 801 Capitol Mall P.O. Box 944201 SACRAMENTO, CA 94244-2010 (916) 653-1502 TDD: (916) 654-6336 California Relay Service: 1-800-735-2929 (TDD) 1-800-735-2922 (Voice)</p>
	<p>TDD is Telecommunications Device for the Deaf and is reachable only from phones equipped with a TDD Device.</p>